

Cancel claims 1-13.

14. (New) A modular runtime environment architecture comprising:

- a single virtual machine implementation providing virtual machine functionality;
- a plurality of support libraries, wherein a support library includes library functions;
- a bi-directional virtual machine interface for communication between a first support library from the plurality of support libraries and the single virtual machine implementation, the interface defining virtual machine implementation-dependent operations performed by the virtual machine implementation;
- wherein the virtual machine interface supports communication between a second support library, capable of replacing the first support library, from the plurality of support libraries and the virtual machine implementation, without modification of the virtual machine interface or the virtual machine implementation; and
- wherein the virtual machine functionality is supported by any one of the support libraries from the plurality of support libraries.

15. (New) A runtime environment in which a virtual machine implementation uses a first support library implementation wherein the first support library implementation can be replaced by a second support library implementation without modifying the virtual machine implementation, and wherein a bi-directional virtual machine interface enables communication between the virtual machine implementation and the first support library and communication between the virtual machine implementation and the second support library.

16. (New) A virtual machine implementation suitable for use in a runtime environment, the virtual machine implementation having a virtual machine interface defining a number of operations performed by the virtual machine implementation, and wherein the runtime environment has at least some library functions that call virtual machine implementation-dependent functions that perform operations that are dependent on the particular virtual machine implementation used to perform the operations; and

whereby the virtual machine interface defines operations that are virtual machine implementation-dependent, the virtual machine implementation comprising a set of implementation functions for executing operations defined by the virtual machine interface, and

wherein the virtual machine interface with a first support library and the virtual machine implementation, and the virtual machine implementation is suitable for use in conjunction with a plurality of support libraries that are arranged to conform to the virtual machine interface, whereby the first support library can be replaced by a second support library without altering the virtual machine interface or virtual machine implementation.

17. (New) A runtime environment suitable for use in conjunction with one virtual machine implementation and a plurality of support libraries, the runtime environment having a virtual machine interface that facilitates communications between a first support library and the virtual machine implementation, the virtual machine interface defining virtual machine dependent operations performed by the virtual machine implementation; and wherein:

the first support library includes library functions with at least some of the library functions able to call virtual machine implementation-dependent functions that perform virtual machine implementation-dependent operations; and

wherein the virtual machine interface defines operations that are virtual machine implementation dependent; and

the runtime environment is suitable for use in conjunction with a second support library from the plurality of support libraries that has library functions with at least some of the library functions able to call virtual machine implementation-dependent functions that perform virtual machine implementation-dependent operations, the second support library able to conform to the virtual machine interface.